SUMMARY

On March 20th, 2001, the Benefits, Evaluation, and Costs (BEC) committee of ITS America sponsored a half-day workshop at the Renaissance Mayflower Hotel in Washington, D.C., to assist in the determination of national ITS benefits data needs. The results of this effort and the corresponding survey will assist the ITS JPO in determining where the application of limited evaluation resources will provide the greatest advantage. Thirty-two (32) attendees participated in the workshop, representing federal government, regional planning agencies (metropolitan planning organizations and regional councils), local transportation agencies, professional associations, universities, and consultants.

WELCOME

Peggy Tadej, NARC Director of Special Projects, opened the meeting with a summary of last year's workshop. She noted that NARC is trying to increase participation of various stakeholders[1]. Greg Hatcher (Mitretek Systems) thanked Peggy and asked everyone to introduce himself or herself and state their area of interest. Interest areas included the following:

- Archive Data User Service (ADUS)
- ARTIMIS system evaluation
- Advanced traveler information systems (ATIS)
- Advanced traffic management systems (ATMS)
- Bus priority
- CVISN impacts
- Data collection and archiving for operational purposes
- Integration earmarks
- Planning impacts
- Red light running
- Reliability of travel
- Rural ITS
- Safety
- Simulation modeling to estimate benefits
- Stretching the transportation dollar

Joe Peters of the ITS Joint Program Office (JPO) acknowledged ITS America's sponsorship and thanked them for their support.

WORKSHOP BACKGROUND

Greg presented the purpose of the workshop, past workshop details, priority data needs areas, and the data needs process.

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[1] To increase participation, James Pol suggested advertising the event in the Transport Communications Newsletter. Larry Brown suggested that the Survey Announcement be submitted to AASHTO and ITE.

Someone asked how the survey is sensitized to biased results (e.g., high participation by transit specialists). Greg explained the two-step process of collecting results and preparing a priority list. The survey results are based solely upon the ratings by participants, weighted by the number of responses to each area. Those results are then considered in the determination of a priority list by the JPO. In this final step, judgement can be applied to account for possible biases in the process, or to account for other factors, such as what evaluations have been funded recently. Joe Peters added that there could be presentation and discussion of results after they are published.

DATABASE DEMONSTRATION

Rob Maccubbin (Mitretek Systems) demonstrated the Benefits Database by reviewing various methods of accessing records including View by Component, View by Measure and View by Location.

A question was asked about sources of data[2]. Rob discussed the document queue and noted that Mitretek occasionally searches the National Technical Information Service (NTIS) for relevant documents. He also mentioned the Transportation Research Information Services (TRIS) database and other databases accessed by Mitretek. Amy Polk (JPL) noted that all federal ITS reports are included in the Electronic Document Library (EDL) and forwarded to Mitretek for inclusion in the Benefits Database, if appropriate. Amy said that in terms of the number of ITS records/reports, the EDL is more robust than NTIS.

Due to interest, Rob also demonstrated the Cost Database. Joe noted that ITS Integration Program participants are required to report cost data yearly. Someone noted the high level of integration expected in these projects and asked how integration would impact presentation of costs and benefits data. To answer that question, Rob discussed and displayed the Integration View.

Rob highlighted the new Intermodal Freight and Information Management categories. The Information Management category was created in recognition of the value of information, especially for planning purposes. Vassili Alexiadis (Cambridge Systematics) mentioned that archived data could help to reduce the data collection costs associated with performing evaluations (in Minnesota, $250,000 was spent just on GPS travel time runs of 4 freeway segments for the ramp metering shut-down study). There was a brief discussion of the cross-cutting nature of Information Management.

Rob completed the database demonstration by covering View by Date Submitted and Available Documents options.

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[2] Characteristics of Urban Transportation Systems (CUTS) data was recommended as a source of benefits data.

OVERVIEW OF SURVEY & HANDOUTS

Rob reviewed each page of the Data Needs Survey. He reviewed the remaining handouts including the desk reference, Summary of Known Benefits[3], Benefits of Metropolitan Integration, and the Survey Announcement.

Regarding the survey, concern was expressed over having to fill out areas of the survey which weren't familiar to the participants. Rob and Greg stated that survey respondents need not fill out the areas they don't feel qualified to address; the only part of the survey which will be factored into the results is the part which is filled in (that is, leaving the cell "blank" is equivalent to a "no-vote" for that area).

In a comment about Taxonomy nomenclature, concern was expressed that those unfamiliar with technical terms would be unable to access useful information. Rob suggested that site visitors view the definitions provided on the help page.

DISCUSSION OF DATA NEEDS - Metropolitan

Rob led a discussion of data needs in the Metropolitan area. Arterial Management Systems are heavily evaluated. Joe noted that "Study in Progress" designated in the Summary of Known Benefits table includes Integration Program national evaluations but does not include Field Operational Tests which may be in progress.

Someone asked what measures are heavily covered in the Metropolitan area. Rob explained that Travel Time and Delay appear frequently. He also noted that Travel Time Reliability is becoming another good measure. Someone asked what type of data is contained in the database. Rob answered that measured data is the primary data type, supplemented with predicted or estimated data.

Participants expressed that just because the number of records is low in a given area, it is not necessarily a data gap (for example, electronic toll collection didn't have as many records as expected, but the benefits are well understood and no federal evaluation is necessary).

The definition of "Regional Multimodal" was questioned. There was no agreement on whether it means "Regional *or* Multimodal" or "Regional *and* Multimodal", however, it was clear that the category was intended to be inclusive of regional, multimodal, and regional multimodal information systems.

A question about how mode choice was represented in the database was raised. Rob's answer was that the "customer satisfaction" measure is used.

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[3] In the table, it was suggested that "no benefits" be replaced with "indirect benefits".

DISCUSSION OF DATA NEEDS - Metropolitan Integration

One participant expressed their opinion that links 21a and 21b (EM-to-IM) should be considered a priority link. Paul Pisano (FHWA) mentioned that maintenance management should be included in the bubble chart. Some discussion ensued about the extent to which maintenance should be reflected in the taxonomy.

In the discussion of Metropolitan Integration, Marcia Pincus (ITS America) mentioned the need to provide higher level meta-analysis information to the user. This type of information can help provide answers to questions such as "What is implementing a 511 program going to cost me?" and "What are the benefits of integration?"

DISCUSSION OF DATA NEEDS - Rural

A brief discussion of technical issues versus institutional issues prompted Joe Peters to note that the problem is not a lack of data, but poor communication of benefits data to the right people, in the right way. Many jurisdictions desire a tool that helps them assess specific benefits to their area. The ITS Deployment Analysis System (IDAS) is a tool which provides that functionality.

Workshop participants noted three areas of data needs in both metropolitan and rural areas – the variability and reliability of travel, safety in highway and bus operations (localized to time-of-day, not just global measures), and the effect of maintenance on operations (failure rate of inductive loop detectors is a big problem). Operating agencies are focusing more on providing "reliable" service than simply offering "capacity". It was suggested that the focus of evaluations should be on what type of data is collected and which evaluation measures are used. For example, capacity might be a useful measure for planning purposes since ITS projects often compete with road improvement projects for operations and maintenance funds.

Someone suggested that rural categories should match those in the metropolitan area. The JPO uses the designation "rural aspect of" specific metropolitan categories. Joe asked if there is a need for rural traffic management and how it was different than metropolitan applications. Paul Pisano noted that evacuations from rural coastal areas significantly impact traffic management. It was recognized that implementation of various systems will be different in rural areas. Joe stated that the metropolitan/rural split in the taxonomy will be further addressed.

DISCUSSION OF DATA NEEDS – CVO & Intermodal

CVISN evaluation data will be released in the next few months. Data needs in the ITS/CVO area include deployment, operations and maintenance benefits and costs for electronic Safety Screening and Credential Checking. In Carrier Operations, data is needed on cargo monitoring and communication links to incident response agencies. Also, fixed versus portable systems should be distinguished in the electronic Weight Screening area.

Amy noted the similarity between ITS/CVO Border Clearance and Intermodal Freight Border Crossing Processes.

WRAP UP

Greg Hatcher wrapped the meeting up by thanking the participants for their contributions and reminding them to send in their surveys by the end of the month.